

Remarks

The applicants gratefully acknowledge that the objections to the pending claims have been withdrawn and the rejections of the claims under 35 USC § 112, second paragraph, have also been reconsidered and withdrawn.

The sole remaining issue is whether the applicants' claims 1, 2 and 6 are rendered obvious by Ault-Riche et al in view of Martin et al, Schleifer et al, Jacob et al, and Duhamel et al. A review of these references shows that the applicants' claims are not rendered obvious by these references either alone or in combination.

Under patent law the Office must first review the scope and content of the prior art, ascertain the differences between the prior art and the claims in issue, and resolve the level of ordinary skill in the art. Graham v. John Deere 148 USPQ 459 (1966). To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 180 USPQ 580 (CCPA 1974).

The prior Office action mailed 10/04/06 noted "Ault-Riche et al do not specifically teach using microwave irradiation for immobilization and accelerating the blocking reaction as recited in claim 1." [Emphasis in original]. The Office action should have also noted that Schleifer et al, Jacob et al, and Duhamel et al also do not teach using microwave irradiation for immobilization and accelerating the blocking reaction as recited in claim 1. In fact, none of these references is cited for or teaches the use of microwave radiation. One reference and one reference alone is cited to teach the use of microwave radiation, that reference being Martin et al. But if this reference does not teach using microwave irradiation as the applicants have claimed, then the standard of Royka has not been met, and the Office has not met

its burden of providing a prima facie case of obviousness. In the present instance, not only has not prima facie teaching of obviousness been proffered, but also the cited reference actually teaches away from the method claimed by the applicants.

The applicants have specifically claimed in claim 1: printing proteins on a slide of aldehyde surface to produce a protein array, in which the proteins as printed on the slide are immobilized by microwave radiation for 30 to 90 seconds; immersing the slide in PBSM which comprises 2% w/v skim milk in PBS buffer and irradiating with microwave radiation for 1 to 5 minutes for a blocking reaction". It is clear that at least this second step is a bulk reaction: namely that the present applicants have claimed that the microwave energy is not targeted but instead is applied to the slide immersed in solution and the bulk solution is irradiated. As noted in the prior response, Martin et al teaches away from the use of microwave irradiation to heat a bulk aqueous target. Instead, Martin et al, instead noting (as seen in the summary of this invention) that microwave energy is taught to be used not to heat bulk liquids but instead to be specifically focused onto solid supports containing microwave absorbing materials. This effectively teaches away from the claims of the present invention.

Claims 2 and 6 depend on independent claim 1 and should be allowed for at least the same reasons provided for the allowance of independent claim 1.

Conclusion

Reconsideration is requested in view of the remarks herein. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) on the date shown below:

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Typed Name: Merle P. Garcia  
Date: July 20, 2007



David Schneck

Reg. No. 43,094

Schneck & Schneck

P.O. Box 2-E

San Jose, CA 95109-0005

(408) 297-9733